STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0074349; AI 19217; PER20050001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** St. Martin Parish Water & Sewer District No. 1
Stephensville Wastewater Treatment Plant
Post Office Box 2384
Morgan City, LA 70381

II. **PREPARED BY:** Angela Marse

DATE PREPARED: June 30, 2006

III. **PERMIT ACTION:** LPDES permit LA0074349, AI 19217; PER20050001

LPDES application received: December 22, 2005

LPDES permit issued: February 1, 2001
LPDES permit expired: January 31, 2006

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving Stephensville.

B. Via telephone correspondence with pretreatment personnel, the permitee did not indicate the receipt of industrial wastewater.

C. The facility is located at 1076 Tower Tank Road in Stephensville, St. Martin Parish.

D. The treatment facility consists of a package-type treament plant with influent bar screens, an aeration section, a clarifier, and a digester for sludge. Disinfection is by chlorination.

E. Outfall 001

Discharge Location: Latitude 29° 46' 18" North
Longitude 91° 09' 52" West

Description: treated sanitary wastewater

Design Capacity: 0.25 MGD

Type of Flow Measurement which the facility is currently using: Totalizing Meter

V. RECEIVING WATERS:

The discharge is by pipe into Bayou Milhomme, thence into Bayou Boeuf, thence into Bayou Chene in segment 120201 of the Terrebonne Basin. This segment is listed on the 303(d) list of impaired waterbodies.
The designated uses and degree of support for Segment 120201 of the Terrebonne Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Not Supported	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Full Supported	Not Supported	N/A	N/A	N/A	N/A

[1/]The designated uses and degree of support for Segment 120201 of the Terrebonne Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303(d) of the Federal Clean Water Act requires states to identify waterbodies that are not meeting water quality standards and to develop total maximum daily pollutant loads for those waterbodies. A pollutant is any substance introduced into the waters of the state by any means that would tend to degrade or impair the chemical, physical, biological, or radiological integrity of such environment. In addition, it further requires that states develop TMDL (Total Maximum Daily Load) management plans for waterbodies determined to be water quality limited. Subsegment 120201, Lower Grand River and Belle River – Bayou Sorrel Lock to Lake Palourde (includes Bayou Natchez, Lake Natchez, Bayou Milhomme, and Bayou Long), is on the 303(d) list of impaired waters. The suspected causes of impairment were organic enrichment/low DO, pathogen indicators, nitrate/nitrite, sulfates, and phosphorus.

To date no TMDLs have been completed for this waterbody. The schedule for completion of TMDLs in the Terrebone Basin is in 2008. A reopener clause will be established in the permit to allow for more stringent effluent limitations and requirements if required by a TMDL. Causes of the previous listed impairments have been associated with sanitary sewage treatment and will be addressed in the proposed permit as follows.

PATHOGEN INDICATORS

Monitoring for fecal coliform colonies is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against the development of pathogenic organisms in the receiving waterbodies, fecal coliform limits have been established in the permit.

ORGANIC ENRICHMENT/LOW DO

Organic enrichment/low DO will be addressed in permit development. BOD_5 is used as a method to measure the amount of dissolved oxygen in the waste stream utilized by organisms during the decomposition of organic material over a five day period. Monitoring for BOD_5 allows for the determination of the rate of oxidation in the waste stream. (Higher BOD_5 indicates lower dissolved oxygen and higher organic content.) The proposed permit contains BOD_5 effluent limits consistent with the previous permit.

NITRATE/NITRITE and PHOSPHORUS

LDEQ's declaratory ruling (April 29, 1996) stated "DO is a direct correlate with overall nutrient impact is a well-established biological and ecological principle. Thus, when the LDEQ maintains and protects DO, the LDEQ is in effect also limiting and controlling nutrient concentrations and impacts." By limiting dissolved oxygen in the permit, LDEQ is in effect limiting and controlling nitrogen and phosphorus.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 120201 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and FWS, no further informal (Section7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001

No facility changes have occurred nor have any new water quality studies been conducted for this subsegment since the issuance of the last permit. Therefore, effluent limitations will remain the same with the exception of monitoring and reporting ammonia-nitrogen. Subsegment 120201 is impaired for nitrite, nitrate, and phosphorus. Dissolved oxygen monitoring will help the Sewer District determine compliance with any TMDL Studies approved in the future.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	21	10 mg/l	15 mg/l	Based on the Statewide Sanitary Effluent Limits Policy (SSELP) and the previous permit.
TSS	32	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. This is consistent with the previous permit.
Dissolved oxygen**	---	Report mg/l	N/A	BPJ based on receiving water impairments.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0074349: Issued: February 1, 2001
Expired: January 31, 2006

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD_5	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains biomonitoring.
The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed for this facility.

Date - February 2, 2004
Inspector - LDEQ
Findings and/or Violations -

1. The inspection was in response to an incident/complaint. A manhole overflowed all weekend at 1018 Florence Court.

2. Raw sewage was found on the ground around the manhole. The sewage was cleaned up and disinfected with lime. The sewer line was repaired to prevent another overflow.

B) Compliance and/or Administrative Orders

A review of the files indicates no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January, 2003 through December, 2005 has revealed the following violations:

Effluent Characteristic	Number of Violations
Fecal Coliform	17

XII. ADDITIONAL INFORMATION:

Please be aware that the Department will be conducting a TMDL in the Terrebonne Basin scheduled for completion in 2008. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.25 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 lb/gal x 0.25 MGD x 10 mg/l = 21 lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language is included in the permit. This is consistent with the previous permit.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, St. Martin Parish Water & Sewer District No. 1,Stephensville Wastewater Treatment Plant, December 22, 2005 .